

The circuit 202 performs recognizing processing basing on the information and sends the result to a word processing section 3 together with the end signal. The inputted words are clause analyzed by a clause analyzing section 301. At the same time, kana-kanji conversion is performed using a dictionary section 302 basing on the end signal from the circuit 202. The result is displayed on a display section 4 through a correction and edition section 303 or printed by a printing section 5. Thus, by automatic kana-kanji conversion based on the end signal, operability can be improved.

7/5/17 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014169448 \*\*Image available\*\*  
WPI Acc No: 2001-653676/200175

**System and method for automatically performing translation based on sentence frame**

Patent Assignee: KOREA ELECTRONICS & TELECOM RES INST (KOEL-N)  
Inventor: CHOI S G; JUNG H M; KIM T W; KIM Y G; PARK S G; PARK S Y; SEO G J  
; SEO Y A; SIM C M; YEO S H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No.	Kind	Date	Applicat No	Kind	Date	Week
KR 2001057775	A	20010705	KR 9961182	A	19991223	200175 B

Priority Applications (No Type Date): KR 9961182 A 19991223

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 2001057775	A	1	G06F-017/28	

Abstract (Basic): KR 2001057775 A

NOVELTY - A system and method for automatically performing a translation based on a sentence frame is provided to naturally generate a translated sentence by removing a structural ambiguity on the basis of a sentence frame, which represents a frame of a sentence.

DETAILED DESCRIPTION - A source language morpheme analyzer(20) analyzes a morpheme of a source language sentence, and detects information on parts of speech of each word. A translation dictionary(21) stores a source vocabulary, a substitutive word of the vocabulary and quality information related to the word. A phrase unit syntax analyzer (22) represents an input sentence using the information detected from the source language morpheme analyzer(20). An original frame searcher(23) searches a constraint. An original frame database(24) stores a basic constraint of a relevant original frame. A sentence frame converter(25) converts the original into morpheme columns of an object language. A translation sentence frame database(26) stores constraint information of an original slot and designated information of a translation sentence slot. A slot translation database(27) stores constraint information of a part of speech of the original and designated information of a part of speech of the translation. An object language morpheme generator(28) analyzes the morpheme of the object language.

pp; 1 DwgNo 1/10

Title Terms: SYSTEM; METHOD; AUTOMATIC; PERFORMANCE; TRANSLATION; BASED; SENTENCE; FRAME

Derwent Class: T01

International Patent Class (Main): G06F-017/28

File Segment: EPI

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DIALOG(R) File 350:Derwent WPIX  
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014077495 \*\*Image available\*\*

E/C SEARCH  
7/11/2002

WPI Acc No: 2001-561709/200163

XRFX Acc No: N01-417818

Vocal phrase comparison device for telephone, compares vocal phrase and keyword, and displays comparison result

Patent Assignee: NITTSUKO KK (NITT-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001215984	A	20010810	JP 200021243	A	20000131	200163 B

Priority Applications (No Type Date): JP 200021243 A 20000131

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001215984	A		6	G10L-015/00	

Abstract (Basic): JP 2001215984 A

NOVELTY - An A/D converter (3) converts the input audio signal from vocal input section (2) into digital signal. A speech recognition section recognizes the digital signal from A/D converter as a vocal phrase (6), which is recorded in a recorder (10). A comparator compares the vocal phrase read-out from recorder and the keyword from a recorder. A display unit displays the comparison result.

USE - For conference, telephone.

ADVANTAGE - Enables efficient output of information using a simple device without transmission leakage.

DESCRIPTION OF DRAWING(S) - The figure shows the profile block diagram of vocal phrase comparison device. (Drawing includes non-English language text).

Vocal input section (2)

A/D converter (3)

Vocal phrase (6)

Recorder (10)

pp; 6 DwgNo 1/2

Title Terms: VOICE; PHRASE; COMPARE; DEVICE; TELEPHONE; COMPARE; VOICE; PHRASE; KEYWORD; DISPLAY; COMPARE; RESULT

Derwent Class: P86; T01; W01; W04

International Patent Class (Main): G10L-015/00

International Patent Class (Additional): G06F-003/16; G10L-015/22;

H04M-001/00; H04M-003/42

File Segment: EPI; EngPI

7/5/19 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012744556 \*\*Image available\*\*

WPI Acc No: 1999-550673/199946

XRFX Acc No: N99-407472

Speech. recognition method using a computer, for teaching language reading skills

Patent Assignee: SYRACUSE LANGUAGE SYSTEMS INC (SYRA-N)

Inventor: ROTHENBERG M

Number of Countries: 083 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9940556	A1	19990812	WO 99US2782	A	19990209	199946 B
AU 9926663	A	19990823	AU 9926663	A	19990209	200005
US 6134529	A	20001017	US 9820899	A	19980209	200054

Priority Applications (No Type Date): US 9820899 A 19980209

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9940556	A1	E	32	G09B-019/04	

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

...a fundamental component. The parser of an embodiment of the present invention is used for **speech-to-speech translation** and integrates feature structure manipulations into a GLR parsing algorithm by introducing a flexible representation...

7/5,K/17 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00731958 \*\*Image available\*\*

A METHOD AND APPARATUS FOR EXAMPLE-BASED SPOKEN LANGUAGE TRANSLATION WITH  
EXAMPLES HAVING GRADES OF SPECIFICITY  
METHODE ET APPAREIL PERMETTANT D'EFFECTUER UNE TRADUCTION REPOSANT SUR  
L'EXEMPLE AVEC DES EXEMPLES DOTES D'UNE CERTAINE SPECIFICITE DE DEGRE

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Wilshire Boulevard, Los Angeles, CA 90025-1026, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200045289 A1 20000803 (WO 0045289)

Application: WO 99US28879 19991202 (PCT/WO US9928879)

Priority Application: US 99240543 19990129

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DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD.TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F-017/28

International Patent Class: G10L-015/18

Publication Language: English

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 19388

#### English Abstract

A method and apparatus for example-based spoken language translation with examples having grades of specificity are provided. A speech input is received comprising source language expressions and source language feature structures. Syntactic analysis is performed (1106) on the source language feature structures and entries of a bilingual example database to determine a pragmatic type of the source language feature structure and a syntactic type of sub-structures of the source language feature structures. A fast match is performed (1108) among the sub-structures and the example database to determine compatibility between the sub-structures and entries of the example database. A best match (1110) is performed among the sub-structures and the example database to optimize matches between the sub-structures and the example database entries. Target language feature structures are generated (1114) using selected entries of the example database, and target language expressions are generated comprising the target language feature structures. A grammatically correct speech output is provided comprising the target language expressions.

#### French Abstract

Cette invention a trait a une methode et a l'appareil correspondant permettant d'effectuer une traduction reposant sur l'exemple avec des exemples dotes d'une certaine specificite de degre. Une entree de signaux vocaux est recue, comprenant des expressions ainsi que des structures particulieres de langage source. Il est procede a une analyse syntaxique (1106) des structures et entrees d'une base de donnees bilingue d'exemples afin de determiner un type pragmatique de la structure

particuliere de langage et un type syntaxique de sous-structures des structures particulieres de langage. Une rapide mise en correspondance (1108) des sous-structures et de la base de donnees d'exemples permet de determiner une compatibilite entre les sous-structures et les entrees de la base de donnees d'exemples. La meilleure mise en correspondance (1110) realisee entre les sous-structures et la base de donnees d'exemples permet d'optimiser les mises en correspondance entre les sous-structures et les entrees de la base de donnees d'exemples. On cree des structures particulieres de langage (1114) a l'aide d'entrees selectionnees de la base de donnees d'exemples ainsi que des expressions de langage cible comportant les structures particulieres de langage. Il est egalement cree une sortie de signaux vocaux, grammaticalement correcte, comportant les expressions particulieres de langage.

Legal Status (Type, Date, Text)

Publication 20000803 A1 With international search report.

International Patent Class: G10L-015/18

Fulltext Availability:

Detailed Description

Detailed Description

... As discussed herein, an embodiment of the present invention comprises a powerful parser for natural **language**. A parser is a software module that takes as input a **sentence** of a **language** and returns a structural **analysis**, typically in the form of a syntax tree. Many applications in natural language processing, machine...a fundamental component. The parser of an embodiment of the present invention is used for **speech -to-speech translation** and integrates feature structure manipulations into a GLR parsing algorithm by introducing a flexible representation...